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(SHIBUYA, Takashi) [JP/JP]; 〒700-0907 岡山県岡山市下石井1丁目2番3号 株式会社林原生物化学研究所内 Okayama (JP). 福田 恵温 (FUKUDA, Shigeharu) [JP/JP]; 〒700-0907 岡山県岡山市下石井1丁目2番3号 株式会社林原生物化学研究所内 Okayama (JP). 三宅 俊雄 (MIYAKE, Toshio) [JP/JP]; 〒700-0907 岡山県岡山市下石井1丁目2番3号 株式会社林原生物化学研究所内 Okayama (JP).

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(71) 出願人 (米国を除く全ての指定国について): 林原 健 (HAYASHIBARA, Ken) [JP/JP]; 〒700-0921 岡山県岡山市東古松4丁目9番8号 Okayama (JP).

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(72) 発明者; および  
(75) 発明者/出願人 (米国についてのみ): 渋谷 孝

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

(54) Title: REFINED ROYAL JELLY

(54) 発明の名称: 精製ローヤルゼリー

(57) Abstract: It is intended to provide refined royal jelly which has a lessened allergenicity but sustains the useful pharmacological effects inherent to royal jelly, a process for producing the same and use thereof. In the refined royal jelly as described above, the content of water-soluble proteins is lessened to 50% by weight or below based on the total protein content. The process for producing the same is characterized by comprising the step of adding water to royal jelly and centrifuging to thereby divide the mixture into a precipitate and a supernatant containing water-soluble proteins, the step of subjecting the obtained supernatant to ultrafiltration or gel filtration to thereby remove high-molecular weight substances containing the water-soluble proteins and collect low-molecular weight substances, and the step of mixing the low-molecular weight substances thus obtained with the precipitate as described above.

(続葉有)

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11311

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.<sup>7</sup> A23L1/076, A61K7/00, 7/48, A23K1/16

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.<sup>7</sup> A23L1/076, A61K7/00, 7/48, A23K1/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 4-311357 A (Api Kabushiki Kaisha), 04 November, 1992 (04.11.92), Full text; particularly, Claim 2; examples 1 to 6 (Family: none)	1-3, 5, 6, 9-12 4, 7, 8
X Y	JP 2001-61418 A (Pola Chemical Industries Inc.), 13 March, 2001 (13.03.01), Full text; particularly, Claims 1, 4; Par. Nos. [0008], [0009], [0011] (Family: none)	1-3, 5, 6, 9-12 4, 7, 8
Y	JP 2000-60455 A (Api Kabushiki Kaisha), 29 February, 2000 (29.02.00), Par. No. [0011] (Family: none)	4

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

### \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance  
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Date of the actual completion of the international search  
01 December, 2003 (01.12.03)

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/11311

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5543513 A (Kabushiki Kaisha Hayashibara; Seibutsu Kagaku Kenkyujo), 06 August, 1996 (06.08.96), Full text; particularly, column 6, line 58 to column 7, line 15 & EP 600730 A1 & AU 9352033 A & CA 2110331 A & CN 1094054 A & TW 308555 A & US 5693788 A & JP 6-170221 A	7,8
A	JP 2002-112715 A (Api Kabushiki Kaisha), 16 April, 2002 (16.04.02), Par. No. [0012] (Family: none)	1-12
A	JP 11-146759 A (Kirin Beverage Kabushiki Kaisha), 02 June, 1999 (02.06.99), Full text (Family: none)	1-12